

**Amendments to the Abstract:**

**Please replace the previous Abstract with the following redlined Abstract:**

A photo transistor has an active region ~~(24)~~ spaced from a source ~~(28)~~ by barrier ~~(26)~~. A drain ~~(20)~~ is laterally spaced from the active region ~~(24)~~. Light incident on the active region creates electron-hole pairs. Holes accumulate at the barrier and modulate the effective barrier height to electrons. A gate reset voltage then is applied to gate ~~(4)~~ which lower the barrier allowing the holes to escape.